Shortcut to peritonitis

BY SHIRLEY A. ZEIGLER, *RN, CRNP,* MSN

A 52-YEAR-OLD MAN performing continuous cyclic peritoneal dialysis (CCPD) therapy at home noticed that a section of his cycler tubing felt rougher than normal, yet the dialysate infused normally. During the initial drain, he saw fluid spurting and dripping from this rough area. He taped the tubing and completed his exchanges. Two days later, he developed abdominal pain and drained cloudy effluent. Diagnosed with peritonitis, he had to be hospitalized for antibiotic therapy.

What went wrong: A CCPD system requires new tubing for each setup. The patient didn't realize that the rough area in the new tubing was a defect that compromised the system's sterility. When he saw fluid leaking from the tubing, he should have restarted the procedure with new tubing and informed his health care provider of the problem.

Peritonitis is a common complication of peritoneal dialysis. Probably the most frequent cause is improper aseptic technique when making or breaking connections between the cycler tubing and dialysate bag or between the tubing and the patient's dialysis catheter.

Preventing problems: Teach patients who use CCPD the proper technique and safeguards for home therapy:

- Gather and inspect all equipment and supplies before starting the procedure.
- Discard any equipment that's cracked, leaking, or defective, or that may have been contaminated, and start over. Never try to patch or tape the equipment.
- Wash your hands with antibacterial soap before connecting the dialysate bags to the catheter.
- Avoid distractions and shortcuts. Perform exchanges in a clean, well-lit environment.
- Properly disconnect the tubing and restart therapy if you're interrupted.
- Contact your primary care provider if the drainage fluid is cloudy; if your abdomen becomes painful, tender, or rigid; or if you develop nausea, vomiting, diarrhea, or a fever greater than 99.5" F (37.5° C). N

SELECTED REFERENCES

Brenner, B.: Brenner and Rector's The Kidney, 7th edition. Philadelphia, Pa., W.B. Saunders Co., 2004.

Daugirdas, J., et al.: Handbook *of* Dialysis, 3rd edition. Philadelphia, Pa., Lippincott Williams & Wilkins, 2001.

Although you need ro support the adverse event–reporting policy of your health care facility, you may voluntarily report a medical device that doesn't perform as intended by calling MedWatch at 1-800-FDA-1088 (fax: 1-800-FDA-0178). The opinions and statements in this report are those of the author and may not reflect the views of the Department of Health and Human Services. Beverly Albrecht Gallauresi, RN, BS, MPH, coordinates *Device Safety*.

ley A. Z is a nurse-consultant for the Center for Devi and Radiological ealth of tl Food and Drug Administration in e, Md.